

**BERYTUS FABRICIUS, 1803 (INSECTA, HETEROPTERA,
BERYTIDAE): PROPOSED DESIGNATION OF *CIMEX CLAVIPES*
FABRICIUS, 1777 AS TYPE SPECIES. Z.N.(S)2464**

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The genus *Berytus* was founded by Fabricius, 1803, pp. 264–265, for two species, *Cimex tipularius* Linnaeus, 1758 and *Cimex clavipes* Fabricius, 1775. Fabricius 'indicated' *tipularius* as the type species of his new genus by giving an extended description of the genus following the name of this species. This is not now regarded as a valid method of type species designation but Reuter, 1888, p. 546, cited the bibliographic reference to *Berytus tipularius* of Fabricius, 1803, adding the words 'ut typus'. On page 548 of the same work, Reuter stated 'Typus generis *Berytus* Fabr. (1803) est *tipularius* L. (Vide supra)'.

2. The genus *Neides* was founded by Latreille, 1802, p. 246, for the same two species, *Cimex tipularius* Linnaeus and *Cimex clavipes* Fabricius. Eight years later, Latreille, 1810, p. 433, validly designated *tipularius* as the type species of *Neides*. The two genera were widely regarded as synonymous and the two species as congeneric until Fieber, 1859, monographed the family, placing *tipularius* in *Neides* and *clavipes* in *Berytus*; this action was legitimate at the time as no type species had yet been designated for *Berytus*. Reuter, 1888, pp. 546–548, attempted to reverse the application of the two generic names as used by Fieber but was not followed by subsequent authors, all of whom agree that *clavipes* and *tipularius* are not congeneric; the result of his actions was only to sink *Berytus* as a synonym of *Neides*, leaving *Berytus* sensu Fieber without a name.

3. Mulsant & Rey, 1870, established three new subgenera within *Berytus* sensu Fieber: *Melorus* (p. 212, for *Neides hirticornis* Brullé, 1835, with its synonym *Berytus pilicornis* Flor, 1862 and probable synonym *Berytus trichocerus* Scholtz, 1846); *Lizinus* (p. 212, for *Berytus montivagus* Meyer-Dür, 1841, with its synonym *Berytus rotundatus* Flor, 1862, and *Berytus signoreti* Fieber, 1859) and *Xanthocerus* (p. 224, for the two new species, *longicollis* and *gracilis*, and, dubiously, *Berytus angustipennis* Costa, 1860). No type species have ever been designated for any of these three subgenera; all three have been ignored by all subsequent authors. *Xanthocerus* Mulsant & Rey, 1870 is preoccupied by *Xanthocerus* Agassiz, 1845: p. 168, an emendation of *Xanthoceros* Newman, 1842, in Coleoptera.

4. Kirkaldy, 1900 p. 241, accepted that *Berytus* was a junior synonym of *Neides* and established the new genus *Berytinus* for *Berytus* sensu Fieber non Fabricius, designating as type species *Cimex clavipes* Fabricius, 1775. This name has been generally accepted by twentieth-

century authors. Under the provisions of the Code it should fall as a synonym of either *Melorus* or *Lizinus*.

5. Stichel, 1957, p. 44, established within *Berytinus* Kirkaldy the subgenus *Berytinellus*, citing as type species *Berytinus montivagus* Meyer-Dür, 1841. This subgenus is a subjective synonym of *Lizinus* Mulsant & Rey, as it includes all three species-group names eligible for designation as type species of *Lizinus*.

6. The name of the family BERYTIDAE is based on the generic name *Berytus* which, being a junior synonym of *Neides* at present, is not a valid name. Because of this, Southwood & Leston, 1959, pp. 7, 118, changed the name of the family to BERYTINIDAE. Under the provisions of Article 40(a) of the 1961 edition of the International Code of Zoological Nomenclature, such changes are to be maintained only if they had won general acceptance before 1961. This criterion obviously could not be satisfied for a name change proposed in 1959, so the family name remains BERYTIDAE based on *Berytus*, and not BERYTINIDAE, based on *Berytinus*.

7. The main problem of nomenclature involved is that the well-known Palearctic genus *Berytinus* Kirkaldy (= *Berytus* sensu Fieber non Fabricius) should fall as a synonym of either *Melorus* or *Lizinus*, both of which names are completely unfamiliar to entomologists. *Berytus* Fabricius was legitimately restricted by Fieber, 1859, to *clavipes* and its allies and became a synonym of *Neides* Latreille only as a result of Reuter's (1888) fixation of *tipularius* as the type species of Fabricius's nominal genus. It is obvious from Reuter's work that he thought he was simply repeating Fabricius's invalid type designation but under Article 69(a) (iii) Reuter's action is a valid designation in its own right. Under Recommendation 69B(3) the species selected as type should have been *clavipes*. A secondary problem is that, if Reuter's type species designation is allowed to stand, the type genus of the family remains as a junior synonym. There are four possible courses of action, which I outline below; the last three of these require intervention by the Commission.

- (1) The name *Berytinus* could be allowed to fall as a synonym of either *Lizinus* or *Melorus*.
- (2) The name *Berytinus*, type *clavipes*, could be placed on the Official List of Generic Names in Zoology.
- (3) The names *Lizinus* and *Melorus* could be suppressed and placed on the Index of Rejected and Invalid Generic Names in Zoology.
- (4) The name *Berytus*, type *clavipes*, could be placed on the Official List of Generic Names in Zoology and Reuter's type species designation could be set aside.

If course (1) were followed, the current name of the genus would be changed to an unfamiliar one and the type genus of the family would remain a junior synonym. If course (2) were followed, current usage would be preserved, *Melorus* and *Lizinus* would remain available for use as names of subgenera and the type genus of the family would remain a junior

synonym. If course (3) were followed, the same situation would result except that these two names would not be available. If course (4) were followed, current usage would give way to an earlier, legitimate usage of a name familiar as the type genus of the family and *Melorus* and *Lizinus* would still be available for use as names of subgenera.

8. Accordingly, I ask the International Commission on Zoological Nomenclature:

- (1) to use its plenary powers to set aside all designations of type species hitherto made for the nominal genus *Berytus* Fabricius, 1803, and, having done so, to designate *Cimex clavipes* Fabricius, 1775, as type species of that genus;
- (2) to place the generic name *Berytus* Fabricius, 1803 (gender: masculine), type species, by designation under the plenary powers in (1) above, *Cimex clavipes* Fabricius, 1775, on the Official List of Generic Names in Zoology;
- (3) to place the specific name *clavipes* Fabricius, 1775, as published in the binomen *Cimex clavipes* (specific name of type species of *Berytus*, Fabricius, 1803), on the Official List of Specific Names in Zoology.

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